



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,875	08/19/2003	Jeffrey J. Malay	GMI0011/US	8640
33072	7590	10/28/2005		
KAGAN BINDER, PLLC SUITE 200, MAPLE ISLAND BUILDING 221 MAIN STREET NORTH STILLWATER, MN 55082			EXAMINER BLAKE, CAROLYN T	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/645,875

Applicant(s)

MALAY ET AL.

Examiner

Carolyn T. Blake

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.  
4a) Of the above claim(s) 24-27 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-23 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is in response to applicant's amendment received on August 8, 2005.
2. The objection to the drawings is withdrawn in view of the amendment.
3. The objection to the specification is withdrawn in view of the amendment.
4. The objection to claim 17 is withdrawn in view of the amendment.
5. The text of those sections in Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

6. Claims 1, 7-10, 13-17, 20, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox (5,879,278).

Regarding claims 1, Cox discloses a method of making individual sealing members (192) for containers from a sheet of material (160), the method comprising the steps of: conveying a sheet of material (160) in a travel direction relative to the die cutter (150) to bring a portion of the sheet (160) into alignment with the die cutter (150); moving the die cutter (150) into engagement with the sheet (160) and cutting a plurality of sealing members (192) from the sheet (160), the cutter (150) comprising a plurality of cutting surfaces (210, 212, 214, 216) shaped and arranged for cutting a pattern of sealing members (192) from the sheet (160), wherein each of the sealing members (192) comprises a base portion and first and second extending tabs (col. 1, lines 22-24); and separating the sealing members (192) from the sheet material (160). Cox fails to disclose the position of the tabs. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to position the sealing

Art Unit: 3724

members so that the tabs and base portions are not touching in order to maximize space while creating a complete seal.

Regarding claim 7, Cox discloses the base portion of the sealing members (192) is circular.

Regarding claim 8, Cox discloses a perimeter of the base portion of each of the sealing members (192) corresponds to a perimeter of a container opening onto which the sealing member (192) will be placed.

Regarding claim 9, Cox discloses the step of providing the plurality of sealing members (192) to a container sealing operation.

Regarding claim 10, Cox discloses the sheet material (160) is a continuous sheet of sealing material.

Regarding claim 13, Cox discloses the pattern is repeated along the length of the sheet (160) in the travel direction to provide a plurality of identical sealing members (192) while maximizing the area of the sheet (160) that comprises sealing members (192).

Regarding claim 14, Cox discloses the travel direction of the sheet of material (160) is generally perpendicular to the direction of movement of the die cutter (150) when the cutter (150) is cutting the plurality of sealing members (192) from the sheet of material (160).

Regarding claim 15, any extending tab of a sealing members (192) will inherently be positioned adjacent a base portion of an adjacent sealing member (192).

Regarding claim 16, the space between the base portion of the interior sealing members will inherently be partially bound by the base portions of other adjacent members.

Regarding claim 17, Cox discloses the die cutter (204) is a rolling die cutter comprising a plurality of die blade (210, 212, 214, 216) arranged around the perimeter of the roller.

Regarding claim 20, Cox discloses the step of separating the plurality of sealing members (192) from the sheet of material (160) comprises punching the sealing members (192) from the sheet (160) in a direction that is generally perpendicular to the travel direction of the sheet of material (160).

Regarding claim 22, Cox discloses a method of maximizing the quantity of individual sealing members (192) cut from a sheet of material (160) having first and second opposite edges, wherein the sealing members each comprise a base portion and two tab portions (col. 1, lines 22-24) extending from the base portion, the method comprising the steps of: providing a cutting mechanism (150) for cutting individual sealing members (192) in a pattern of rows that are generally parallel to each other, wherein each row is diagonally oriented relative to the first and second edges of the sheet; and moving a sheet of material (160) relative to the cutting mechanism (150) to bring a portion of the sheet (160) into alignment with a die cutter (150); and engaging the cutting mechanism (150) with the sheet (160) and cutting a plurality of individual sealing members (192) from the sheet (160). Cox fails to disclose the position of the tabs. However, it would have been obvious to one of ordinary skill in the art at the time

Art Unit: 3724

the invention was made to position the sealing members so that the tabs and base portions are not touching in order to maximize space while creating a complete seal.

Regarding claim 23, Cox discloses a method of making individual sealing members (192) for containers from a sheet (160) of material, the method comprising the steps of: conveying a sheet of material (16) in a travel direction relative to a die cutter (15) to bring a portion of the sheet (160) into engagement with the sheet (160) and cutting a plurality of sealing members (192) from the sheet (160), the cutter (150) comprising a plurality of cutting surfaces (210, 212, 214, 216) shaped and arranged for cutting a pattern of sealing members (192) from the sheet (160), wherein each of the sealing members comprises a base portion and first and second extending tabs (col. 1, lines 22-24). Cox fails to disclose the position of the tabs. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to position the sealing members so that the tabs and base portions are not touching in order to maximize space while creating a complete seal.

7. Claims 2-6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox as applied to claim 1 above, and further in view of Williams (3,206,017). Cox fails to disclose the position of the tabs. However, Williams discloses a method of making individual sealing members (12) wherein the pattern of sealing members (12) further includes positioning the sealing members (192) so that a first reference line extends diagonally relative to the travel direction of a sheet (10), wherein the first reference line intersects the base portion of the first sealing member and a longitudinal centerline of a first and second extending tabs (22) of the first sealing member and

Art Unit: 3724

further intersects the base portion of a fourth sealing member and a longitudinal centerline of the first and second extending tabs (22) of the fourth sealing member. Williams further discloses the first reference line is further positioned tangentially to the base portion of the second and third sealing members. In addition, Williams discloses a second reference line that extends in a generally perpendicular direction to the first reference line, wherein the second reference line extends through a center point of the base portions of the second and third sealing members, thereby establishing a first diagonal row of sealing members (12) comprising the second and third sealing members. Williams discloses a second diagonal row of sealing members (12) that is parallel to the first diagonal row of sealing members (12), wherein the first diagonal row is parallel to the second diagonal row, and wherein the second diagonal row comprises the first sealing member. Furthermore, Williams discloses the first extending tab (22) of each of the sealing members (12) is oriented approximately 180 degrees from the second extending tab (22) of the same sealing member (12). This arrangement of sealing members and tabs is advantageous because the tabs do not interfere with one another and the sheet space is maximized (col. 2, lines 41-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to align the sealing members and tabs, as disclosed by Williams, of the Cox method for the purpose of maximizing space without tab interference.

8. To the degree it can be argued the tab position of the Cox reference is speculative, claims 1, 7-10, 12-17, 20, 22, and 23 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Cox in view of Williams.

Cox discloses a method of making individual sealing members (192) for containers from a sheet of material (160), the method comprising the steps of: conveying a sheet of material (160) in a travel direction relative to the die cutter (150) to bring a portion of the sheet (160) into alignment with the die cutter (150); moving the die cutter (150) into engagement with the sheet (160) and cutting a plurality of sealing members (192) from the sheet (160), the cutter (150) comprising a plurality of cutting surfaces (210, 212, 214, 216) shaped and arranged for cutting a pattern of sealing members (192) from the sheet (160). Cox fails to disclose tabs on a sealing member or the position of the tabs. However, Williams discloses a method of making individual sealing members (12) wherein the pattern of sealing members (12) further includes positioning the sealing members (192) so that a first reference line extends diagonally relative to the travel direction of a sheet (10), wherein the first reference line intersects the base portion of the first sealing member and a longitudinal centerline of a first and second extending tabs (22) of the first sealing member and further intersects the base portion of a fourth sealing member and a longitudinal centerline of the first and second extending tabs (22) of the fourth sealing member. Williams further discloses the first reference line is further positioned tangentially to the base portion of the second and third sealing members. In addition, Williams discloses a second reference line that extends in a generally perpendicular direction to the first reference line, wherein the second reference line extends through a center point of the base portions of the second and third sealing members, thereby establishing a first diagonal row of sealing members (12) comprising the second and third sealing members. Williams discloses a second



Art Unit: 3724

diagonal row of sealing members (12) that is parallel to the first diagonal row of sealing members (12), wherein the first diagonal row is parallel to the second diagonal row, and wherein the second diagonal row comprises the first sealing member. Furthermore, Williams discloses the first extending tab (22) of each of the sealing members (12) is oriented approximately 180 degrees from the second extending tab (22) of the same sealing member (12). Tabs on a sealing member make the member easier to remove from a container, and this arrangement of sealing members and tabs is advantageous because the tabs do not interfere with one another and the sheet space is maximized (col. 2, lines 41-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide sealing members and align the sealing members and tabs, as disclosed by Williams, with the Cox method for the purpose easily removing the tabs from a container and maximizing space without tab interference.

Regarding claim 7, Cox discloses the base portion of the sealing members (192) is circular.

Regarding claim 8, Cox discloses a perimeter of the base portion of each of the sealing members (192) corresponds to a perimeter of a container opening onto which the sealing member (192) will be placed.

Regarding claim 9, Cox discloses the step of providing the plurality of sealing members (192) to a container sealing operation.

Regarding claim 10, Cox discloses the sheet material (160) is a continuous sheet of sealing material.

Regarding claim 13, Cox discloses the pattern is repeated along the length of the sheet (160) in the travel direction to provide a plurality of identical sealing members (192) while maximizing the area of the sheet (160) that comprises sealing members (192).

Regarding claim 14, Cox discloses the travel direction of the sheet of material (160) is generally perpendicular to the direction of movement of the die cutter (150) when the cutter (150) is cutting the plurality of sealing members (192) from the sheet of material (160).

Regarding claim 15, any extending tab of a sealing members (192) will inherently be positioned adjacent a base portion of an adjacent sealing member (192).

Regarding claim 16, the space between the base portion of the interior sealing members will inherently be partially bound by the base portions of other adjacent members.

Regarding claim 17, Cox discloses the die cutter (204) is a rolling die cutter comprising a plurality of die blade (210, 212, 214, 216) arranged around the perimeter of the roller.

Regarding claim 20, Cox discloses the step of separating the plurality of sealing members (192) from the sheet of material (160) comprises punching the sealing members (192) from the sheet (160) in a direction that is generally perpendicular to the travel direction of the sheet of material (160).

Regarding claim 22, Cox discloses a method of maximizing the quantity of individual sealing members (192) cut from a sheet of material (160) having first and

Art Unit: 3724

second opposite edges, wherein the sealing members each comprise a base portion, the method comprising the steps of: providing a cutting mechanism (150) for cutting individual sealing members (192) in a pattern of rows that are generally parallel to each other, wherein each row is diagonally oriented relative to the first and second edges of the sheet; and moving a sheet of material (160) relative to the cutting mechanism (150) to bring a portion of the sheet (160) into alignment with a die cutter (150); and engaging the cutting mechanism (150) with the sheet (160) and cutting a plurality of individual sealing members (192) from the sheet (160). Cox fails to disclose tabs on a sealing member or the position of the tabs. However, Williams discloses a method of making individual sealing members (12) wherein the sealing members (12) and tabs (22) are positioned as claimed. Tabs on a sealing member make the member easier to remove from a container, and this arrangement of sealing members and tabs is advantageous because the tabs do not interfere with one another and the sheet space is maximized (col. 2, lines 41-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide sealing members and align the sealing members and tabs, as disclosed by Williams, with the Cox method for the purpose easily removing the tabs from a container and maximizing space without tab interference.

Regarding claim 23, Cox discloses a method of making individual sealing members (192) for containers from a sheet (160) of material, the method comprising the steps of: conveying a sheet of material (16) in a travel direction relative to a die cutter (15) to bring a portion of the sheet (160) into engagement with the sheet (160) and

Art Unit: 3724

cutting a plurality of sealing members (192) from the sheet (160), the cutter (150) comprising a plurality of cutting surfaces (210, 212, 214, 216) shaped and arranged for cutting a pattern of sealing members (192) from the sheet (160), wherein each of the sealing members comprises a base portion. Cox fails to disclose tabs on a sealing member or the position of the tabs. However, Williams discloses a method of making individual sealing members (12) wherein the sealing members (12) and tabs (22) are positioned as claimed. Tabs on a sealing member make the member easier to remove from a container, and this arrangement of sealing members and tabs is advantageous because the tabs do not interfere with one another and the sheet space is maximized (col. 2, lines 41-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide sealing members and align the sealing members and tabs, as disclosed by Williams, with the Cox method for the purpose easily removing the tabs from a container and maximizing space without tab interference.

9. Claims 11, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox as applied to claim 1 above, and further in view of Giles et al (4,960,216).

Regarding claim 11, Cox fails to disclose multiple sheets of material. However, Giles et al disclose a method of making individual sealing members (160) wherein the sheet of material is a first discrete sheet (100) of sealing material, and wherein the method further comprises the step of conveying a second sheet (120) of material in the travel direction to bring a portion of the second sheet into engagement with a cutter

Art Unit: 3724

(140). The different layers give the sheet unique qualities, such as being adhesive to a container surface and keeping moisture out of the container. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide two sheets of sealing material, as disclosed by Giles et al, with the Cox method in order to create an adhesive and moisture-resistant seal.

Regarding claims 18 and 19, Cox fails to disclose the material choice for the sheet. However, Giles et al disclose a method of making individual sealing members (160) wherein the sheet of material comprises a heat transfer foil layer (22) and a heat activated adhesive layer (18). The foil layer readily indicates tampering because tears are irreparable. In addition, the foil layer is durable and impermeable, sealing out moisture from the product in the container (col. 2 lines 58-64). The adhesive layer adheres to the surface of the container in order to secure the seal. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the sheet with a heat transfer foil layer and a heat activated adhesive layer, as disclosed by Giles et al, with the Cox method for the purpose of indicating product tampering, sealing out moisture, and securing the seal.

10. Claims 11, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox in view of Williams as applied to claim 1 above, and further in view of Giles et al (4,960,216).

Regarding claim 11, the Cox-Williams combination fails to disclose multiple sheets of material. However, Giles et al disclose a method of making individual sealing members (160) wherein the sheet of material is a first discrete sheet (100) of sealing

Art Unit: 3724

material, and wherein the method further comprises the step of conveying a second sheet (120) of material in the travel direction to bring a portion of the second sheet into engagement with a cutter (140). The different layers give the sheet unique qualities, such as being adhesive to a container surface and keeping moisture out of the container. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide two sheets of sealing material, as disclosed by Giles et al, with the Cox-Williams combination in order to create an adhesive and moisture-resistant seal.

Regarding claims 18 and 19, the Cox-Williams combination fails to disclose the material choice for the sheet. However, Giles et al disclose a method of making individual sealing members (160) wherein the sheet of material comprises a heat transfer foil layer (22) and a heat activated adhesive layer (18). The foil layer readily indicates tampering because tears are irreparable. In addition, the foil layer is durable and impermeable, sealing out moisture from the product in the container (col. 2 lines 58-64). The adhesive layer adheres to the surface of the container in order to secure the seal. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the sheet with a heat transfer foil layer and a heat activated adhesive layer, as disclosed by Giles et al, with the Cox-Williams combination for the purpose of indicating product tampering, sealing out moisture, and securing the seal.

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over as Cox applied to claim 1 above, and further in view of Knudsen (4,095,390). Cox fails to

Art Unit: 3724

disclose an induction sealing system. However, Knudsen discloses an indication sealing system for securing each of the sealing members to a container opening by induction sealing. This process is particularly suitable for foil sealing members, and is very fast. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an induction sealing station, as disclosed by Knudsen, with the Cox method for the purpose of quickly sealing the sealing members to a container.

12. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over as Cox in view of Williams applied to claim 1 above, and further in view of Knudsen.

The Cox-Williams combination fails to disclose an induction sealing system. However, Knudsen discloses an indication sealing system for securing each of the sealing members to a container opening by induction sealing. This process is particularly suitable for foil sealing members, and is very fast. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an induction sealing station, as disclosed by Knudsen, with the Cox-Williams combination for the purpose of quickly sealing the sealing members to a container.

### ***Response to Arguments***

13. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn T. Blake whose telephone number is (571) 272-

Art Unit: 3724

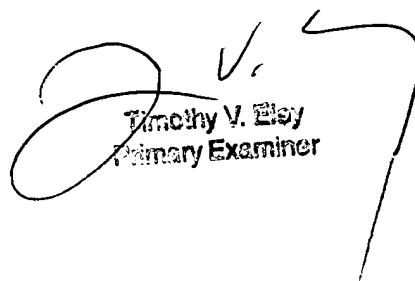
4503. The examiner can normally be reached on Monday to Friday, 8:00 AM to 5:30 PM, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CB

October 26, 2005

  
Timothy V. Eley  
Primary Examiner